5:Cooper E-4 (no date) 1946 SG4 Araucanians SG4

with the latter complex; it more probably was not part of pre-Hispanic Mapuche-Huilliche culture (McCluffery, 1933, p. 44).

Horned cattle, sheep, pigs, and chickens were taken over very early, beginning in the 16th century. The use of the Iberian hamstringer for cattle, a long pole with a crescent-shaped blade on its distal end, was reported by Molina (1878 b, p. 487) for the second third of the 18th century.

Fishing.—Fish and shellfish were important elements in the diet of the mainland Mapuche-Huilliche living on or near the Coast, while among the Chilenos they, with potatoes, constituted most of the food supply. Many kind of fish were taken, such as mullets (*Mugil* sp.), flatfish (*Paralichthys* sp.), pamplos (*Sparus* sp.), silversides (*Austromenidia regia*), etc. The chief shellfish eaten were: Sea urchins (*Strongylocentrotus* sp.), crustaceans (*Aegla* sp. and *Parastacus* sp., and probably also marine crabs of several species), and bivalves (*Mytilus* sp., *Amphidesma* sp., *Tellina* sp., Unionids, and others). Ascidians or sea-squirts (*Pyura*) were sought also for food.

Fish were taken with: *Nets* of bark, of cheapen (*Ovalipis ephemeloides*), and, later, of hemp; *pounders* and *baskets*, baited and put under water (Guevara Silva, 1911, p. 160); *fykes* of quila (*Chusquea* sp.); *hooks* (of thorn, bone, or wood) and *line*; *spears*, including a three-pronged one; *clubs* with studded heads; and *voice of brimstone*, used by the Indians of Chiloé (Oliveros, 1874, p. 260). Fish were also taken by poisoning small lagoons or still water in streams with *Drimys winteri* (Febrés, 1882, s. v. canelo; Havens, 1888, p. 171). No whale hunting is reported.

Food storage.—Grain and other food were stored in hill caves, on elevated platforms, and in hide sacks; potatoes, in kilns within the hut.

Food preparation and cooking.—Cooking was done by the women. Maize was prepared in many ways. Green maize was boiled in earthen pots or roasted over the fire or in hot embers, or it was dried, shelled, roasted in sand, and ground to flour with metate and two-handed cylindrical muller (Ovalle, 1888, 12: 188; Claude Joseph, 1901, pp. 60–61). Two kinds of flour were made: raw, or raspy; and parched, or mobile. From the first was made a bread, bollo, in the form of flat cakes, or tortillas, baked in ashes, or in pit ovens. A sort of kumis (*kusiw*) was made from a bit of the grain chewed by the old women and children and left to ferment in water or in a hole in the ground (Latcham, 1909, p. 340 [post-Columbian?]). The parched maize (or wheat) in cold water was regularly taken on setting in the early morning and other meals. A bread was also made of knotgrass, fern, mutton, and beans. (Cf. supra under Wild Plant Foods, p. 708.)

Meat was preferred lightly cooked. Some bits were eaten raw. Meat was cut in strips and smoked or smoked to make charki, or jerked meat.